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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,024	01/15/2002	Ytsen Wielstra	NL010052	5698

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

METZMAIER, DANIEL S

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Advisory Action Before the Filing of an Appeal Brief	Application No. 10/047,024	Applicant(s) WIELSTRA ET AL.	
	Examiner Daniel S. Metzmaier	Art Unit 1712	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 16 December 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
 b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 1-11.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: of the reasons of record. See also the instant DETAILED ACTION.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
 13. ☒ Other: Encl.: PTOL-892.

DETAILED ADVISORY ACTION

1. Applicant's arguments filed December 16, 2005 have been fully considered but they are not persuasive.
2. Applicants (page 4 of 9 of the response noted in the preceding paragraph) assert the silica is formed *in situ* and the solution that the silica is added to contains only an organosilane rather than a metal alkoxide. This has not been deemed persuasive for the following reasons: the claims do not preclude the formation of silica *in situ* prior to addition to the further addition to a solution as set forth in the Nogami et al reference. The Nagami et al reference teaches the formation of an alkaline sol of silica particles (Solution (A)), which is added to a further solution (L). Solution (A) is an alkaline silica particle sol. Solution (L) is formed from tetraisopropoxytitanium, tetraethoxysilane, methyltriethoxysilane, butyl cellosolve, water, aluminum nitrate Nona hydrate, N-methylpyrrolidone, hexylene glycol, and propylene glycol to form a transparent pale-yellow solution having precipitates dissolved therein.

The claims recite the step of adding silica particles to a reaction mixture comprising a first organosilane compound and a metal alkoxide under basic conditions. Applicants do not define the type, source or degree (including duration) of the basic conditions in at least claim 1. Thus, applicants do not exclude the alkalinity from the silica, i.e., ammonia from the silica sol and the N-methylpyrrolidone. Furthermore, applicants do not limit any specific alkoxide in the claims that are anticipated.

Nogami et al employs the same starting materials claimed and characterizes the solution (L) as a true solution, wherein precipitates dissolve in solution. The

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combination of solution (A) and solution (L) would be alkaline since no acid is added and both the ammonia and the N-methylpyrrolidone would be alkaline. Applicants have presented no evidence to rebut these facts. It is noted that the Office does not perform testing of compositions.

3. Applicants assert claim 1 calls for a reaction mixture to comprise an organosilane compound, and a metal alkoxide under basic conditions. Since the organosilane and the metal alkoxide are known to undergo catalyzed hydrolysis in the presence of aqueous base, the claimed reaction mixture would be at least somewhat hydrolyzed. Claims are interpreted for what they represent in the context of the claim and not what they represent separately. Applicants (pages 4 and 5) assert the Nogami et al reference teaches the hydrolysis of the organosilane by an acid catalyst. While Nogami et al mentions acid catalyst, example 12 makes no mention of any acid addition or the presence of any acid. Nogami et al (column 5, lines 4-8) alternatively teaches the hydrolysis solution of the alkoxysilane of formula (2) may contain the hydrolyzed solution of formula (1) formed in the presence of alkaline catalyst, with no problem. It is reasonable to conclude said acid catalyst is an alternative embodiment. Nogami et al (column 5, lines 9 et seq) furthermore teaches the improvement in stability by interesterifying the alkoxides.

4. Applicants (page 5) assert the Nogami et al example 12 employs aluminum nitrate nonahydrate and aluminum nitrate is known to be acidic in solution. This has not been deemed persuasive since the aluminum nitrate is added as a deposition inhibitor rather than an acidic catalyst. Furthermore, Nogami et al (column 3, lines 32-35)

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teaches the aluminum salts include salts that are not acidic, includes as an alternative the use of basic salts of any of the aluminum salts, and teaches the addition n-methylpyrrolidone (a known alkaline amine) to the aluminum salts to prevent crystallization. Applicants direct attention to an online web site by jtbaker that states aluminum nitrate is acidic. Said web site does not provide the degree of acidity. The examiner has provided a copy of the citation as a well as one of N-methylpyrrolidone, which is disclosed as having a pH between 8 and 9.5.

5. Applicants (page 5) assert claims 4 and 5 are patentable based on the arguments set forth to rebut the rejections of claim 1. This has not been deemed persuasive and said arguments have been addressed above.

6. Applicants (pages 5 and 6) assert the examiner has presented no evidence in support of the use of glycidyoxypropyltrimethoxysilane in the Nogami et al reference for its known coupling and adhesive properties. Applicants are redirected to Nogami et al at column 3, lines 8-22, as recited in the rejection wherein R^1 is disclosed as 3-glycidylpropyl group, and R^2 is disclosed as preferably methyl for formula (2) of the reference. Applicants are also directed to Hawley's Chemical Dictionary, page 569, with publication date of at least 1989, wherein γ -glycidyoxypropyltrimethoxysilane¹ is disclosed as a coupling agent. As this is well known in the art the examiner felt no need to burden the record therewith. A copy of Hawley's has been provided. See also Nogami et al (column 5, lines 52 et seq) wherein the overall disclosed coating compositions are characterized as having highly hardened films and good

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adhesiveness. Applicants arguments regarding hindsight are misplaced since Nogami et al provides for the specific 3- glycidyloxypropyltrimethoxysilane, which is a known coupling agent, and Nogami et al teaches the coating compositions provide highly hardened films and good adhesiveness.

7. Applicants (pages 6-9) assert the JSR does not disclose the claimed combination. JSR discloses alkaline curing agents and/or catalyst. Applicants have proffered no evidence or persuasive reasons that the alkaline curing agents and/or catalyst would not function or that said claims would be unexpected over the teachings of the prior art.

8. Applicants (page 8) arguments regarding Nogami et al have been addressed above and have not been deemed persuasive. A *prima facie* case of obviousness having been presented and applicants' arguments are not deemed persuasive. Said *prima facie* case of obviousness is deemed proper and has been maintained. The references teach the claimed embodiments and applicants have not shown any of said embodiments to be unexpected for the breadth of their claims.

9. While applicants assert that the examiner is cherry-picking the reference for arguments favorable to his position, applicants have attributed no weight to the references explicit teaching that basic curing conditions are taught in the references. All disclosures in a reference must be considered for what it fairly teaches those of ordinary skill in the art, not just preferred embodiments or specific working examples. *In re Boe*, 355 F2d 961, 148 USPQ 507, (CCPA, 1966). *In re Chapman*, 357 F2d 418, 148 USPQ

¹ 3-glycidyloxypropyltrimethoxysilane is the same as γ -glycidyloxypropyltrimethoxysilane, wherein γ - is the

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711, (CCPA, 1966). *In re Mills*, 470 F2d 649, 176 USPQ 196, (CCPA, 1972). It is noted that in chemical reactions, the catalyst is not consumed or changed in the reaction. The JSR reference teaches alternatively acid or basic conditions. Applicants provide no unexpected results or further secondary considerations to rebut said teachings.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Daniel S. Metzmaier
Primary Examiner
Art Unit 1712

DSM